

THE INLAND DISTRIBUTION OF *Mus decumanus*.

It appears that, notwithstanding many statements to the contrary, *Mus decumanus* does not occur in India except in sea-ports. This statement may be proved, in the future, to be erroneous, but all the evidence of this inquiry is in favour of the view that the grey rat has not established itself in any part of the interior of the peninsula. Certain writers relate how this rat passes up the great rivers by means of country boats to establish itself in riverside towns, and it has even been stated that it is fast replacing the indigenous rat in India. Allahabad and Cawnpore are situated on the banks of the Ganges at points where the river is navigable for country boats; in both of these cities many thousands of rats were caught, but not one *Mus decumanus* was among them. It is impossible that they could have been overlooked, for in both places the officers in charge of the operations paid great attention to the question of the species caught, and *Mus decumanus* can be easily distinguished from *Mus rattus*.

OTHER OBSERVATIONS BEARING ON THE QUESTION OF  
PLAGUE DISSEMINATION.

It has been sufficiently shown that the species *Mus rattus* is the common house rat throughout the whole peninsula of India, that it occurs intimately associated with man in every place (with the single exception of Quetta) in which it has been looked for. The fact of its absence from Quetta is doubtful and requires confirmation (see page 33). If it could be shown that this species is rare in or absent from Quetta, the cause of its absence should be carefully sought for as it might have a direct bearing on plague prevention. It has been shown that, in any town, rats of this species show individual differences from one another, and that in certain places they show slight racial differences; so that although it is often impossible to say whether a particular rat was native to Tellicherry or Amritsar, it would be easy to identify a group of fifty rats from either place. In certain instances, however, individuals could be identified. For example, single rats from Kashmir, Amritsar and Katmandu could be almost always identified at a glance. In spite of this the fact remains that any of a small collection of house rats from Adelaide in Australia can be "matched" exactly, by searching among large numbers of the rats of Calcutta, Bombay, Cawnpore or many other large towns on the plains of India. In colour they can be matched as closely as two threads in the same skein of coloured silk. In proportions of body and skull the similarities are not less than those indicated by this comparison. Therefore it seems that there is no reason why a rat should not wander freely, in or out of the country, and intermingle with the rats of places far removed from its own birth-place, without being recognised as an interloper. However, all the evidence that can be obtained shows that rats do not wander freely, that they rarely move from village to village of an Indian rural district, and that